

ABSTRACT OF THE DISCLOSURE

A dynamic break loop capable closed loop network having a plurality of switches and links. Each switch has two uplink ports that each have a set of dynamic break loop logic functions that may be enabled or disabled. The dynamic functions include inserting an ID number of a source switch into each frame that is transmitted from the switch, enabling a transmit function of each uplink port to monitor the ID number of each frame, and enabling a receive function of each uplink port to monitor the ID number of each frame. If the ID number is not equal to a filter ID number, then the frame will pass unchanged. If the ID number is equal to the filter ID number, then the frame will be cut off and will not be allowed to pass. The dynamic functions create a dynamic break for each switch in the network. The result is a closed loop network that operates dynamically as a plurality of open loop networks.